

Montana DEQ Forest Fire Smoke Advisory

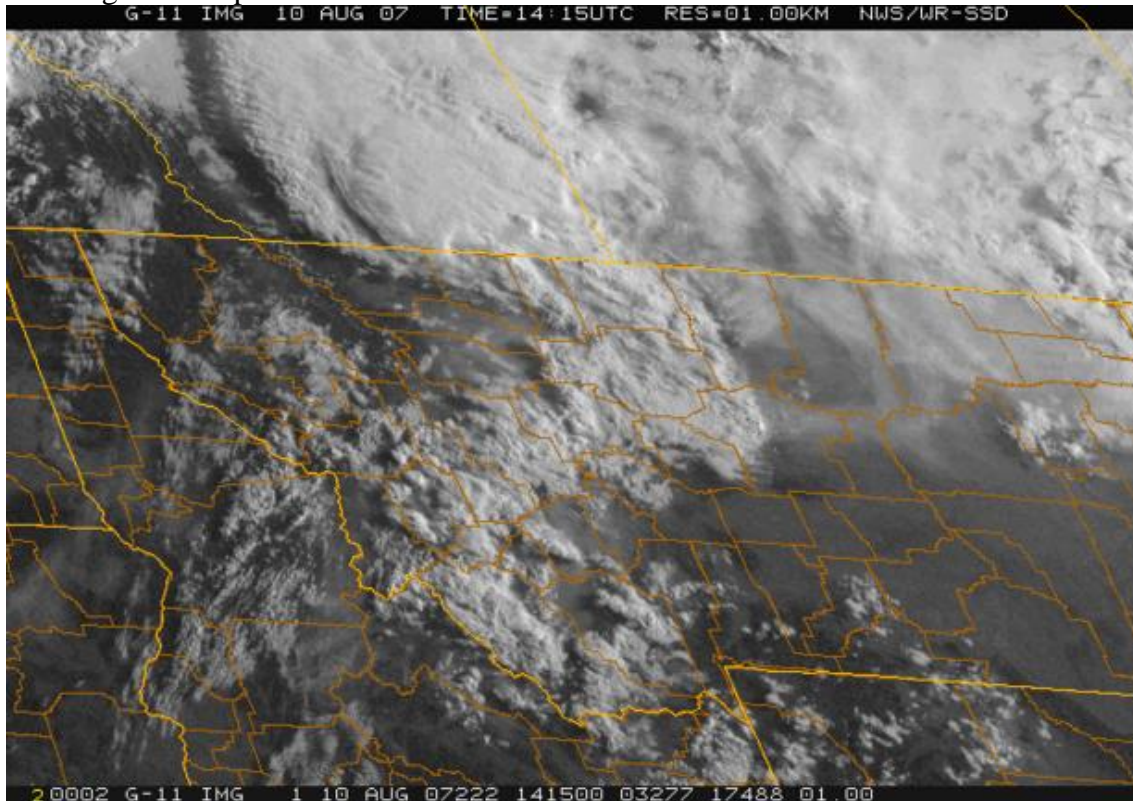
August 10 2007

10:00 AM Friday

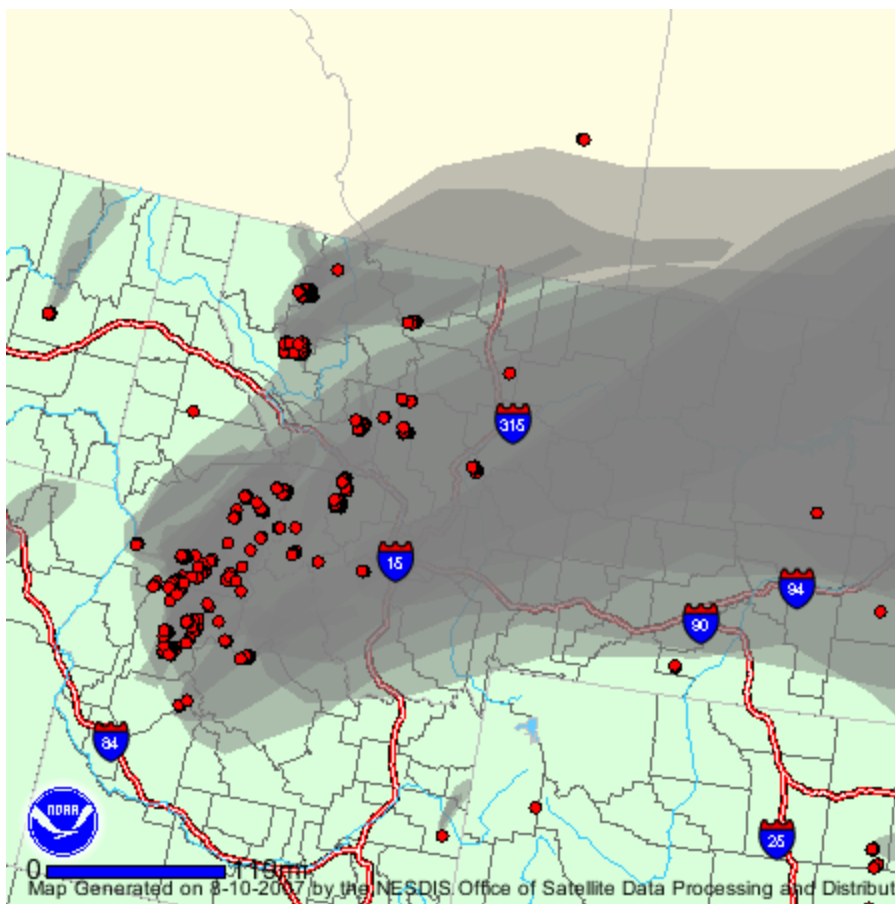
Current Situation

There is lots of smoke visible between the clouds on this morning's satellite photo. The leading edge of a cooler Canadian air mass working its way into the northwest corner of the state is also very evident with the front becoming the back edge of the residual smoke plume. It is still very smoky at the surface in the northern Flathead Valley and Whitefish and Kalispell remain at [UNHEALTHY](#) even though current short term smoke levels have been generally [MODERATE](#) for much of the early morning. [UNHEALTHY FOR SENSITIVE](#) levels of smoke are still impacting Missoula, Hamilton, and Butte as smoke from Idaho combined with smoke from the fires in the southern Bitterroot and Rock Creek drainages has been a continuing problem for those areas. [MODERATE](#) levels are impacting Choteau, Augustus, Helena, Dillon and Baker as well. With the frontal passage today, Red Flag warnings have been posted for high winds and a pronounced shift in wind direction. This will produce a profound change in some impact areas. See the forecast below for details. Direct smoke impacts from the active fires in the state are expected to be a problem later today. Residents near active fires or experiencing noticeable smoke levels should use the [VISIBILITY GUIDELINES](#) to determine smoke levels in their area and guide their activity decisions.

Morning satellite photo centered on Great Falls:



This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind(the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last night's satellite coverage)

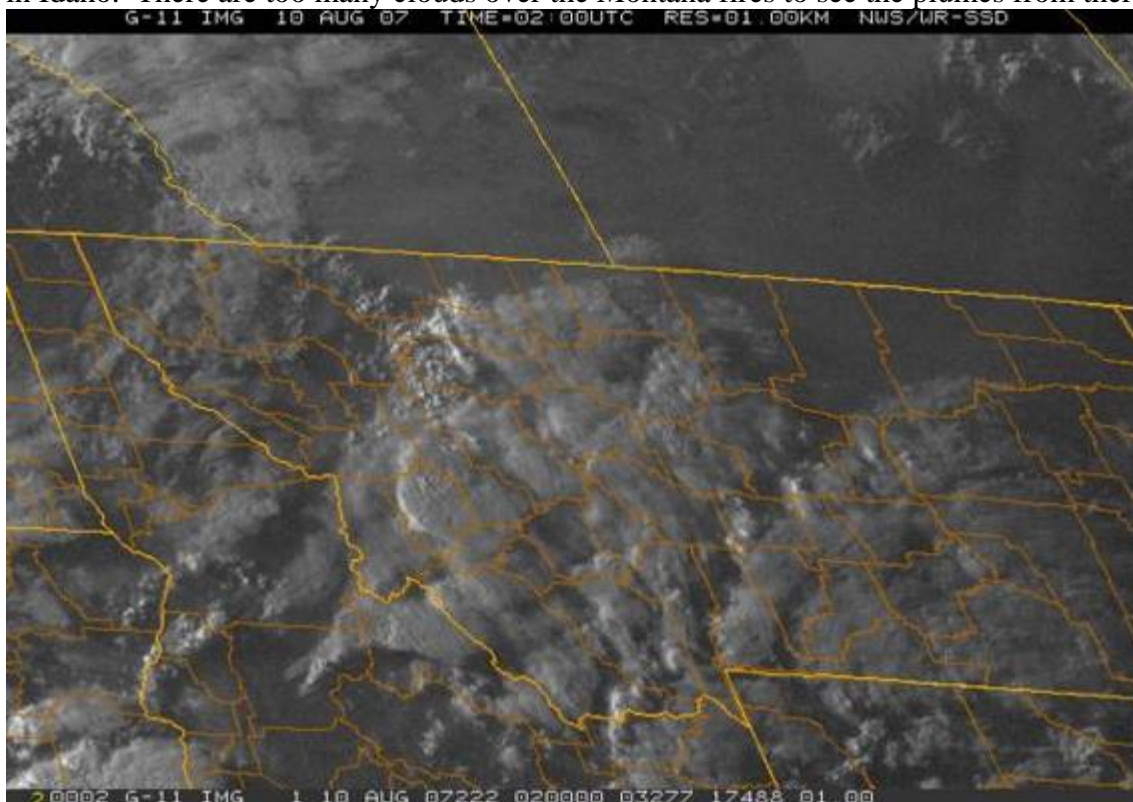


Red indicates hot spot detected. Grey represents smoke seen by satellite. Fire size is exaggerated for visibility at this scale

To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lg_fire2.php

This satellite photo from 8:00 PM last night shows the big plumes coming off of the fires in Idaho. There are too many clouds over the Montana fires to see the plumes from there.



Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

Updated 10 AM August 10, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

<u>HAZARDOUS</u>	
<u>VERY UNHEALTHY</u>	
<u>UNHEALTHY</u>	Whitefish T24 Kalispell T24
<u>UNHEALTHY FOR SENSITIVE GROUPS</u>	Hamilton T24 Butte T24 Missoula T24
<u>MODERATE</u>	Choteau T8 Augusta T8 Helena T8 Dillon Vis(1) Baker Vis(2)

T1(x) One-hour TEOM or BAM value (number of values)
T8(x) Eight-hour average TEOM or BAM value(number of values)
T24 24 hour average TEOM or BAM value
Vis(x) Visibility value(number of hours)
Vis(am/pm) Visibility value from twice/day reporting stations
(est) estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local [visibility guidelines](#) to evaluate possible health risks and make informed activity decisions.

Forecast

Strong gusty southwest winds will be followed by brisk northwest winds today as a weak frontal passage moves through the state from the northwest. This will shift the plume centerlines substantially and will drive the smoke from Idaho into southwest Montana. Smoke impacts will increase in the southern Flathead valley, Great Falls, and Bozeman by this afternoon and evening. There will be heavy local plume impacts from the active fires again this afternoon as the fire activity levels increase. Transport winds will start from the southwest and shift to the northwest by this evening. Strong plume formation is likely over some of the active fires and communities downwind of these fires will need to pay close attention to conditions in their area and use the [visibility guidelines](#) to guide their activity decisions as the situation changes.

[John Coefield](#), Meteorologist
Montana Department of Environmental Quality